NOTICE

Amendment to 803 KAR 2:310, Medical services and first aid, was filed with the Legislative Research Commission on April 27, 2021.

The amendment is posted at https://.legislature.ky.gov. Select the Kentucky Law Tab, Kentucky Administrative Regulations, KAR List by Title, then Title 803 Labor Cabinet and scroll down to the regulation under Chapter 2 Occupational Safety and Health.

Changes to the regulation and public hearing information is available at the aforementioned website or in the pages below following this notice.

FILED WITH LRC TIME: 4-34 am

APR 27 2021

Envily B Caudill
REGULATIONS COMPILER

- 1 LABOR CABINET
- 2 Department of Workplace Standards
- 3 Division of Occupational Safety and Health Compliance
- 4 Division of Occupational Safety and Health Education and Training
- 5 (Amendment)
- 6 803 KAR 2:310. Medical services and first aid.
- 7 RELATES TO: KRS 338[-051(3)]
- 8 STATUTORY AUTHORITY: KRS 338.051(3), 338.061
- 9 NECESSITY, FUNCTION, AND CONFORMITY: KRS 338.051(3) requires the Kentucky
- 10 Occupational Safety and Health Standards Board to [adopt and] promulgate occupational safety
- and health administrative regulations and authorizes the chairman to reference federal standards
- without board approval if necessary to meet federal time requirements. This administrative
- 13 regulation establishes [the] medical services and first aid standards that are [to-be] enforced by
- 14 the Department of Workplace Standards in Division of Occupational Safety and Health in the
- 15 area of general industry.
- Section 1. Definitions. (1) "Employee" is defined by KRS 338.015(2).
- 17 (2) "Employer" is defined by KRS 338.015(1).
- 18 Section 2. (1) The employer shall ensure the ready availability of medical personnel for advice
- and consultation on matters of occupational health.
- 20 (2) [(1)] Employers with eight (8) or more employees within the establishment shall have
- 21 persons adequately trained to render first aid and adequate first aid supplies shall be readily

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- 17 (2) "Employer" is defined by KRS 338.015(1).
- 18 Section 2. (1) The employer shall ensure the ready availability of medical personnel for advice
- and consultation on matters of occupational health.
- 20 (2) [(1)] Employers with eight (8) or more employees within the establishment shall have
- 21 persons adequately trained to render first aid and adequate first aid supplies shall be readily

- 1 available.
- 2 (3) Outside salesmen, truck drivers, seasonal labor, and others who, while performing their
- duties, are away from the premises more than fifty (50) percent of the time shall not be included
- 4 in determining the number of employees.
- 5 (4)(a) [(2)] All other employers shall, in the absence of an infirmary, clinic, or hospital in near
- 6 proximity to the workplace which is used for the treatment of all injured employees, have a
- 7 person or persons adequately trained to render first aid.
- 8 (b) Adequate first aid supplies shall be readily available.
- Section 3. (1) [2.] If the eyes or body of any person may be exposed to injurious corrosive
- material, suitable facilities for quick drenching or flushing of the eyes and body shall be provided
- within the work area for immediate emergency use.
- 12 (2) The facilities shall comply with the provisions of the ANSI/ISEA Z358.1-2014 "American
- National Standard for Emergency Eyewash and Shower Equipment" [American National
- 14 Standards Institute (ANSI) Z-358.1-1990, "Standard for Emergency Eyewash and Shower
- Equipment"], which is incorporated by reference, with the following exceptions:
- (a) [(1)] In a remote area if a person is visibly or audibly separated from coworkers, an audible or
- visible alarm shall activate to alert appropriate personnel when the unit is in use, or in the
- alternative, a two (2) way communication device shall be used.
- 19 (b) The alarm shall continue until the unit is no longer in use.
- 20 (c) [(2)] A facility shall be tested according to the standard monthly.
- 21 Section 4 [3]. Incorporation by reference. (1) ANSI/ISEA Z358.1-2014 "American National
- 22 Standard for Emergency Eyewash and Shower Equipment" [ANSI Z 358.1-1990, "Standards for
- 23 Emergency Eyewash and Shower Equipment, is incorporated by reference.

- 1 (2) This material may be inspected, copied, or obtained, subject to applicable copyright law, at
- 2 the Kentucky Labor Cabinet, Mayo-Underwood Building, 3rd Floor [Division of Occupational
- 3 Safety and Health, 1047 U.S. 127 South], Frankfort, Kentucky 40601, Monday through Friday
- 8:00 a.m. to 4:30 p.m. EST. The Labor Cabinet website is www.labor.ky.gov.
- 5 (3) The ANSI website is www.ansi.org.

As approved by

Larry Roberts, Secretary of Labor

Date

Date

PUBLIC HEARING AND PUBLIC COMMENT PERIOD: A public hearing on this administrative regulation shall be held on July 21, 2021 at 10:00 am (ET). The meeting will be conducted by live videoconference (ZOOM) pursuant to Senate Bill 150, Section 1, subparagraph (8) b (2020) and the continuing state of emergency. Public access to the meeting will be available at

https://us02web.zoom.us/j/86731399141?pwd=Q2VOcDQ3ZkVBaUtoNERCMDNIKzZJZz09, password 446261; or by telephone at (713) 353-0212, (888) 822-7517 toll free, conference code 194378.

Individuals interested in being heard at this hearing shall notify this agency in writing five (5) working days prior to the hearing of their intent to attend. If no notification of intent to attend the hearing is received by that date, the hearing may be canceled. This hearing is open to the public. Any person who wishes to be heard will be given an opportunity to comment on the proposed administrative regulation. A transcript of the public hearing will not be made unless a written request for a transcript is made. If you do not wish to attend the public hearing, you may submit written comments on the proposed administrative regulation. Written comments shall be accepted through July 31, 2021. Send written notification of intent to be heard at the public hearing or written comments on the proposed administrative regulation to the contact person.

CONTACT PERSON: Robin Maples, OSH Standards Specialist, Labor Cabinet, Mayo-Underwood Building, 500 Mero Street, 3rd Floor, Frankfort, Kentucky 40601, Telephone: (502) 564-4107, Facsimile: (502) 564-4769, Email: Robin.Maples@ky.gov.

REGULATORY IMPACT ANALYSIS AND TIERING STATEMENT

Regulation Number: 803 KAR 2:310

Contact person: Robin Maples (502) 564-4107, Robin.Maples@ky.gov, Facsimile: (502) 564-

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(1) Provide a brief summary of:

- (a) What this administrative regulation does: Section 1 of this administrative regulation, effective since January 1, 1975, defines terms. Section 2 reflects the federal requirement and maintains language addressing first aid and first aid supplies. Section 3 maintains and updates language addressing quick drenching or flushing of the eyes and body for emergency use. Section 4 updates the incorporation by reference of ANSI Z358.1-1990 "Standard for Emergency Eyewash and Shower Equipment" to ANSI/ISEA Z358.1-2014 "American National Standard for Emergency Eyewash and Shower Equipment." A comparison of the ANSI documents is provided after the FISCAL NOTE ON STATE OR LOCAL GOVERNMENT. This amendment also updates this administrative regulation to meet KRS Chapter 13A considerations and was reviewed in accordance with House Bill (HB) 50 from the Regular Session of the 2017 General Assembly.
- (b) The necessity of this administrative regulation: This administrative regulation was reviewed in accordance with HB 50 from the Regular Session of the 2017 General Assembly. This regulation is necessary to meet the requirements established in Public Law 91-596 84 STAT. 1590 Section 18 (OSH Act of 1970), 29 CFR 1902.3(c), 29 CFR 1902.3(d), 29 CFR 1953.1(a), 29 CFR 1953.1(b), and 29 CFR 1956.2(a), which all require Kentucky OSH regulations to be as effective as the federal requirements. This regulation is equivalent.
- (c) How this administrative regulation conforms to the content of the authorizing statutes: KRS 338.051(3) requires the Kentucky Occupational Safety and Health Standards Board to promulgate occupational safety and health administrative regulations. This regulation is necessary to meet the requirements established in Public Law 91-596 84 STAT. 1590 Section 18 (OSH Act of 1970), 29 CFR 1902.3(c), 29 CFR 1902.3(d), 29 CFR 1953.1(a), 29 CFR 1953.1(b), and 29 CFR 1956.2(a), which all require Kentucky OSH regulations to be as effective as the federal requirements. This regulation complies and conforms with the authorizing statutes.
- (d) How this administrative regulation currently assists or will assist in the effective administration of the statutes: This administrative regulation promotes worker safety and health throughout Kentucky and ensures the state is as effective as the federal requirement. This regulation is necessary to meet the requirements established in Public Law 91-596 84 STAT. 1590 Section 18 (OSH Act of 1970), 29 CFR 1902.3(c), 29 CFR 1902.3(d), 29 CFR 1953.1(a), 29 CFR 1953.1(b), and 29 CFR 1956.2(a), which all require Kentucky OSH regulations to be as effective as the federal requirements. This regulation is equivalent.
- (2) If this is an amendment to an existing administrative regulation, provide a brief summary of:

- (a) How the amendment will change this existing administrative regulation: Section 1 of this administrative regulation, effective since January 1, 1975, defines terms. Section 2 reflects the federal requirement and maintains language addressing first aid and first aid supplies. Section 3 maintains and updates language addressing quick drenching or flushing of the eyes and body for emergency use. Section 4 updates the incorporation by reference of ANSI Z358.1-1990 "Standard for Emergency Eyewash and Shower Equipment" to ANSI/ISEA Z358.1-2014 "American National Standard for Emergency Eyewash and Shower Equipment." A comparison of the ANSI documents is provided after the FISCAL NOTE ON STATE OR LOCAL GOVERNMENT. This amendment also updates this administrative regulation to meet KRS Chapter 13A considerations and was reviewed in accordance with HB 50 from the Regular Session of the 2017 General Assembly.
- (b) The necessity of the amendment to this administrative regulation: This administrative regulation was reviewed in accordance with HB 50 from the Regular Session of the 2017 General Assembly. This regulation is necessary to meet the requirements established in Public Law 91-596 84 STAT. 1590 Section 18 (OSH Act of 1970), 29 CFR 1902.3(c), 29 CFR 1902.3(d), 29 CFR 1953.1(a), 29 CFR 1953.1(b), and 29 CFR 1956.2(a), which all require Kentucky OSH regulations to be as effective as the federal requirements. This regulation is equivalent.
- (c) How the amendment conforms to the content of the authorizing statutes: KRS 338.051(3) requires the Kentucky Occupational Safety and Health Standards Board to promulgate occupational safety and health administrative regulations. This regulation is necessary to meet the requirements established in Public Law 91-596 84 STAT. 1590 Section 18 (OSH Act of 1970), 29 CFR 1902.3(c), 29 CFR 1902.3(d), 29 CFR 1953.1(a), 29 CFR 1953.1(b), and 29 CFR 1956.2(a), which all require Kentucky OSH regulations to be as effective as the federal requirements. This regulation complies and conforms with the authorizing statutes.
- (d) How the amendment will assist in the effective administration of the statutes: This amendment maintains consistency with the federal requirements. This amendment promotes employee health and safety throughout Kentucky and ensures the state program is as effective as the federal program.
- (3) List the type and number of individuals, businesses, organizations, or state and local governments affected by this administrative regulation: This administrative regulation affects all employers in the Commonwealth covered by KRS Chapter 338 in general industry.
- (4) Provide an analysis of how the entities identified in question (3) will be impacted by either the implementation of this administrative regulation, if new, or by the change, if it is an amendment, including: (a) List the actions that each of the regulated entities identified in question (3) will have to take to comply with this administrative regulation or amendment: No additional compliance duties are imposed and no immediate action is required.
- (b) In complying with this administrative regulation or amendment, how much will it cost each of the entities identified in question (3): There is no additional cost to the OSH Program to implement this administrative regulation.

- (c) As a result of compliance, what benefits will accrue to the entities identified in question (3): This administrative regulation promotes worker safety and health throughout Kentucky and ensures the state is as effective as the federal requirement.
- (5) Provide an estimate of how much it will cost to implement this administrative regulation: (a) Initially: There is no cost to the OSH Program to implement this administrative regulation.
- (b) On a continuing basis: There is no continuing cost to the OSH Program to implement this administrative regulation.
- (6) What is the source of the funding to be used for the implementation and enforcement of this administrative regulation: Current state and federal funding.
- (7) Provide an assessment of whether an increase in fees or funding will be necessary to implement this administrative regulation, if new or by the change if it is an amendment: There is neither an increase in fees nor an increase in funding necessary to implement this amendment.
- (8) State whether or not this administrative regulation establishes any fees or directly or indirectly increases any fees: This administrative regulation neither establishes any fees nor directly or indirectly increases any fees.
- (9) TIERING: Is tiering applied? Tiering is not applied. All employers covered by KRS Chapter 338 are treated equally.

FEDERAL MANDATE ANALYSIS COMPARISON

Regulation Number: 803 KAR 2:310

Agency Contact: Robin Maples (502) 564-4107, Robin.Maples@ky.gov, Facsimile: (502) 564-

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1. Federal statute or regulation constituting the federal mandate. Public Law 91-596 84 STAT. 1590 Section 18 (OSH Act of 1970), 29 CFR 1902.3(c), 29 CFR 1902.3(d), 29 CFR 1953.1(a), 29 CFR 1953.1(b), and 29 CFR 1956.2(a)

2. State compliance standards.

The Kentucky OSH Program is mandated to be at least as effective as the federal requirement. Accordingly, in order to maintain the state program as effective as the federal program, Kentucky must adopt the federal requirement or develop an equivalent standard. This regulation is equivalent.

- 3. Minimum or uniform standards contained in the federal mandate. Public Law 91-596 84 STAT. 1590 Section 18 (OSH Act of 1970), 29 CFR 1902.3(c), 29 CFR 1902.3(d), 29 CFR 1953.1(a), 29 CFR 1953.1(b), and 29 CFR 1956.2(a).
- 4. Will this administrative regulation impose stricter requirements, or additional or different responsibilities or requirements, than those required by the federal mandate? Yes
- 5. Justification for the imposition of the stricter standard, or additional or different responsibilities or requirements: This administrative regulation reflects the federal requirement and maintains language addressing first aid and first aid supplies. The regulation also maintains and updates language addressing quick drenching or flushing of the eyes and body for emergency use.

FISCAL NOTE ON STATE OR LOCAL GOVERNMENT

Regulation Number: 803 KAR 2:310

Contact Person: Robin Maples (502) 564-4107, Robin.Maples@ky.gov, Facsimile: (502) 564-

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1. What units, parts or divisions of state or local government (including cities, counties, fire departments, or school districts) will be impacted by this administrative regulation? This administrative regulation affects any unit, part, or division of state or local government covered by KRS Chapter 338 in general industry.

2. Identify each state or federal statute or federal regulation that requires or authorizes the action taken by the administrative regulation.

KRS 338.051, KRS 338.061, Public Law 91-596 84 STAT. 1590 Section 18 (OSH Act of 1970), 29 CFR 1902.3(c), 29 CFR 1902.3(d), 29 CFR 1953.1(a), 29 CFR 1953.1(b), 29 CFR 1956.2(a)

- 3. Estimate the effect of this administrative regulation on the expenditures and revenues of a state or local government agency (including cities, counties, fire departments, or school districts) for the first full year the administrative regulation is to be in effect.

 None.
- (a) How much revenue will this administrative regulation generate for the state or local government (including cities, counties, fire departments, or school districts) for the first year? None.
- (b) How much revenue will this administrative regulation generate for the state or local government (including cities, counties, fire departments, or school districts) for subsequent years?

None.

- (c) How much will it cost to administer this program for the first year? There are no costs associated with this amendment.
- (d) How much will it cost to administer this program for subsequent years? There are no costs associated with this amendment.

Note: If specific dollar estimates cannot be determined, provide a brief narrative to explain the fiscal impact of the administrative regulation.

Revenues (+/-): Unknown.

Expenditures (+/-): Unknown.

Other explanation: This amendment does not impose any additional requirements or expenditures.

COMPARSION OF MATERIAL INCORPORATED BY REFERENCE

Section	ANSI Z358.1-1990 American National Standard for Emergency Eyewash and Shower Equipment		Comment
1. Scope		Identifies personal wash units and drench hoses as supplemental	minor changes
2. Purpose			reworded, no change of intent
3. Definitions	Removed Emergency Shower Head Gallons per Minute Hand-held Drench Hose Iron-pipe size Self-contained Eyewash Self-contained Shower Stay-open valve	Added Certified Certification Organization Flushing Fluid Column Freeze Protected Equipment Hazardous Material Self-contained Tepid Valve Actuator	added / removed the noted definitions, all 2014 definitions updated, more articulate
4.	Plumbed and Self-Contained Emergency Showers	Emergency Showers	changed section headers
4.1	Performance of Shower Heads	Performance of Emergency Showers	no 1990 sub-paragraphs, broken out and updated in 2014 subparts, section heading also changed
4.1.1			no change
4.1.2		Requires 20 gpm (75.7Lpm) for 15 minutes	new
4.1.3			no change
4.1.4			no change

4.1.5		Once activated, can be used without requiring the use of operator's hands	new
4.1.6		Emergency showers shall be constructed of materials that will not corrode in the presence of the flushing fluid. Stored flushing fluid shall be protected against airborne contaminants.	new
4.2	Performance of Control Valve	Valve actuators shall be located not more than 173.3 cm (69 in.) above the level on which the user stands.	new
4.3	Performance of Valve Actuator - Removed	Emergency Shower Enclosures	removed performance of valve actuator and moved up numbering, no requirement changes
4.4	Shower Enclosure	Testing Procedures for Certification	changed section headers
4.5	Manufactures Performance Testing	4.4.1 (2) Connect the unit per the manufacturer's specifications to a flushing fluid supply at a flow pressure of 207 kPa +3.4 kPa -0 kPa (30 psi +0.5 psi -0 psi).	new
4.5.2 / 4.4.2	Self-Contained Emergency Showers Changed 84 inch height requirement for shower head	The flushing fluid column pattern shall be at least 208 cm (82 in.) and not more than 243.8 cm (96 in.) from the surface on which the user stands.	new
4.6	Installation	4.5 Installation	moved Installation from 4.6 to 4.5
4.6.1	Removed travel distance requirement within 100 feet	4.5.1	removed requirement
4.6.2		4.5.2 Required to reach within 10 seconds, located on same level as hazard, travel path may be free from obstructions that may inhibit use.	new
4.6.3		4.5.3	identical
4.6.4		4.5.4	identical

4.6.5		4.5.5 Required to be free from freezing or use freeze-protected equipment.	new
		4.5.6 If chemical reaction is accelerated by slushing fluid temperature a safety/health advisor should be consulted for each application.	new
		4.5.7 Using a temperature gauge or other means, determine that the flushing fluid is tepid.	new
		4.5.8 When the self-contained emergency shower is installed, its installation shall be verified in accordance with manufacturer's instructions.	new
4.7	Maintenance and Training	4.6 Maintenance and Training	changed 4.7 to 4.6
4.7.1		4.6.1 Manufacturers shall provide operation, inspection and maintenance instructions with emergency shower equipment. Instructions shall be readily accessible to maintenance and training personnel.	new
4.7.2		4.6.2	identical
		4.6.3	identical
		4.6.4	identical
		4.6.5 All emergency showers shall be inspected annually to assure conformance with Section 4.5 requirements of this standard.	new
5	Plumbed and Self-Contained Eyewash Equipment	Eyewash Equipment	changed header title
5.1.1		5.1.1	identical

5.1.2		5.1.2	identical
5.1.3		5.1.3	identical
5.1.4	- -	5.1.4 Eyewashes shall be designed, manufactured and installed in such a manner that, once activated, they can be used without requiring the use of the operator's hands.	new
5.1.5		5.1.5	identical
5.1.6		5.1.6	identical
	-	5.1.7	identical
		5.1.8 Eyewashes shall provide flushing fluid to both eyes simultaneously. A test gauge for making determination of a suitable eyewash pattern shall be a minimum 10.16 cm (4 in.) in length with two sets of parallel lines equidistant from the center (See Illustration 7). The interior set of lines shall be 3.18 cm (1.25 in.) apart and the exterior lines shall be 8.26 cm (3.25 in.) apart. Place the gauge in the stream of the eyewash. The flushing fluid shall cover the areas between the interior and exterior lines of the gauge at some point less than 20.3	new
5.2	Performance of Control Valve	Performance of Control Valve	identical
5.3	Manufacturer's Performance Testing Procedures	Testing Procedures for Certification	changed header title
5.3.1		Connect the unit to a flushing fluid supply per the manufacturer's instructions at a flow pressure of 207 kPa +3.4 kPa -0 kPa (30 psi +0.5 psi -0 psi). Throughout the 15 minute test, ensure the unit is capable of	new

		delivering a minimum of 1.5 liters per minute (0.4 gpm) and that the flushing fluid covers the areas between the interior and exterior lines of the gauge at some point less than 20.3 cm (8 in.) above the eyewash nozzle(s)	
5.3.2 Self- contained Eyewashes	Removed (1) Position the emergency eyewash unit in the operating position so that the discharged water can be collected. Fill the unit with flushing liquid. (2) Using a 3.785-liter (1-gallon) container and a timing device, collect 3.785 liters (1 gallon) of water at the start of the flow. Record the time required to fill the container. (3) Continue to operate the unit for 15 minutes. Using the same equipment, and with the discharge orifice maintained in the same position over the test period, collect 3.785 liters (1 gallon) of water beginning 12.5 minutes after the flow begins. (4) The elapsed time to collect 3.785 liters (1 gallon) of water shall be 2-1/2 minutes or less for each test.	Throughout the 15 minute test, ensure that the eyewash is capable of delivering a minimum of 1.5 liters per minute (0.4 gpm) and the flushing fluid covers the areas between the interior and exterior lines of the gauge at some point less than 20.3 cm (8 in.) above the eyewash nozzle(s)	changed testing procedure
5.4	Installation	Installation	identical
5.4.1			identical
5.4.2	Removed 100 foot travel distance	Be in accessible locations that require no more than 10 seconds to reach. The eyewash shall be located on the same level as the hazard and the path	new

		of travel shall be free of obstructions that may inhibit its immediate use.	
5.4.3			identical
5.4.4			identical
5.4.5	在外面,然后还是这个一个一个一个一个一个一个一个一个一个一个一个一个一个一个一个一个一个一个一		identical
		5.4.6 Deliver tepid flushing fluid. In circumstances where chemical reaction is accelerated by flushing fluid temperature, a facilities safety/health advisor should be consulted for the optimum temperature for each application.	new
		5.4.7 (4) Using the flowmeter or other means, determine that the rate of flow is at least 1.5 liters per minute (0.4 gpm). A test gauge similar to the one pictured in Illustration 7 can be used to verify minimum flow characteristics. (5) Using a temperature gauge or other means, determine that the flushing fluid is tepid.	new
		5.4.8 When the self-contained eyewash is installed, its installation shall be verified in accordance with manufacturer's instructions.	new
5.5	Maintenance and Training	Maintenance and Training	identical
5.5.1		Manufacturers shall provide operation, inspection and maintenance instructions with eyewashes. Instructions shall be readily accessible to maintenance and inspection personnel.	new

5.5.2	All employees who might be exposed to chemical splash shall be instructed in the proper use of emergency syewash units.		updated, see 5.5.4
		5.5.3	identical
		5.5.4 Employees who may be exposed to hazardous materials shall be instructed in the location and proper use of emergency eyewashes.	new
		5.5.5 All eyewashes shall be inspected annually to assure conformance with Section 5.4 requirements of this standard.	new
6.	Personal Eyewash Equipment	Eye/Face Wash Equipment	changed header title
6.1.1			identical
6.1.2			identical
6.1.3		Nozzles and flushing fluid units shall be protected from airborne contaminants. Whatever means is used to afford such protection, its removal shall not require a separate motion by the operator when activating the unit.	new
		6.1.4 Eye/face washes shall be designed, manufactured and installed in such a manner that, once activated, they can be used without requiring the use of the operator's hands.	new
		6.1.5 Eye/face washes shall be constructed of materials that will not corrode in the presence of the flushing fluid.	new
		6.1.6 Eye/face washes shall be capable of delivering flushing fluid to the eyes and face not less than 11.4	new

		liters per minute (3.0 gpm) for 15 minutes. If shut off valves are installed in the line for maintenance purposes, provisions shall be made to prevent unauthorized shut off. 6.1.7 Eye/face washes shall be designed to provide enough room to allow the eyelids to be held open with the hands while the eyes and face are in the flushing fluid stream.	new
		6.1.8 Eye/face washes shall provide flushing fluid to both eyes simultaneously. A test gauge for making determination of a suitable eyewash pattern shall be a minimum 10.16 cm (4 in.) in length with two sets of parallel lines equidistant from the center (See Illustration 7). The interior set of lines shall be 3.18 cm (1.25 in.) apart and the exterior lines shall be 8.26 cm (3.25 in.) apart. Place the gauge in the stream of the eyewash. The flushing fluid shall cover the areas between the interior and exterior lines of the gauge at some point less than 20.3 cm (8 in.) above the eye/face wash nozzle(s).	new
6.2	Maintenance and Training	Performance of Control Valve	reorganized location of Maintenance and Training, see 6.5
6.2.1			moved to 6.5., identical
6.2.2		Employees who may be exposed to hazardous materials shall be instructed in the location and proper use of eye/face washes.	moved to 6.5.4, changed "chemical splash" to "Hazardous Materials"

6.3 Testing Procedures for Certification	new
6.3.1 Plumbed eye/face washes shall be certified as follows: (1) Connect a flowmeter to the unit to be tested, or provide other means of measuring flushing fluid flow. (2) Connect the unit to a flushing fluid supply per the manufacturer's instructions at a flow pressure of 207 kPa +3.4 kPa -0 kPa (30 psi +0.5 psi -0 psi). (3) Open the valve on the unit and verify that it opens in one second and stays open. (4) Throughout the 15 minute test, ensure that the unit is capable of delivering a minimum of 11.4 liters per minute (3.0 gpm) and that the flushing fluid covers the areas between the interior and exterior lines of the gauge at some point less than 20.3 cm (8 in.) above the	new
 6.3.2 Self-contained eye/face washes shall be certified as follows: (1) Set up the unit per the manufacturer's instructions. (2) Fill the unit with flushing fluid or with the pre-packaged fluid provided by the manufacturer. (3) Activate the unit and verify that it can be activated in one second or less and that it stays activated. 	new

	(4) Throughout the 15 minute test, ensure that the unit is capable of delivering a minimum of 11.4 liters per minute (3.0 gpm) and that the flushing fluid covers the areas between the interior and exterior lines of the gauge at some point less than 20.3 cm (8 in.) above the eye/face wash nozzle(s) (Illustration 7).	
	6.4 Installation	new
	6.4.1 Be assembled and installed in accordance with the manufacturer's instructions, including flushing fluid delivery requirements.	new
	6.4.2 Be in accessible locations that require no more than 10 seconds to reach. The eye/face wash shall be located on the same level as the hazard and the path of travel shall be free of obstructions that may inhibit the immediate use of the equipment.	new
	6.4.3 Be located in an area identified with a highly visible sign positioned so the sign shall be visible within the area served by the eye/face wash. The area around the eye/face wash shall be well lit.	new
	6.4.4 Be arranged such that the flushing fluid flow pattern as described in Section 6.1.8 is not less than 83.8 cm (33 in.) and no greater than 134.6 cm (53 in.) from the level on which the user stands and 15.3 cm	new

	(6 in.) minimum from the wall or nearest obstruction.	
	6.4.5 Be connected to a supply of flushing fluid per the manufacturer's installation instructions to produce the required spray pattern for a minimum period of 15 minutes. Where the possibility of freezing conditions exists, the eye/face wash shall be protected from freezing or freeze-protected equipment shall be installed. If shut off valves are installed in the supply line for maintenance purposes, provisions shall be made to prevent unauthorized shut off.	new
	6.4.6 Deliver tepid flushing fluid. In circumstances where chemical reaction is accelerated by flushing fluid temperature, a facilities safety/health advisor should be consulted for the optimum temperature for each application. (See Appendix B6)	new
	6.4.7 When the plumbed eye/face wash is installed, its performance shall be verified in accordance with the following procedures: (1) With the unit correctly connected to the flushing fluid source and the valve(s) closed, visually check the piping connections for leaks. (2) Open the valve to the full open position. The valve shall remain open	new

		without requiring further use of the operator's hands. (3) With the valve in the fully opened position make sure that both eyes and face will be washed simultaneously at a velocity low enough to be noninjurious to the user. (4) Using the flowmeter or other means, determine that the rate of flow is at least 11.4 liters per minute (3.0 gpm). A test gauge similar to the one pictured in Illustration 7 can be used to verify minimum flow characteristics. (5) Using a temperature gauge or other means, determine that the flushing fluid is tepid. 6.4.8 When the self-contained eye/face wash is installed, its installation shall be verified in accordance with manufacturer's	
		instructions.	
-	-	6.5	new section, previously 6.2
		6.5.1	identical to 1990 6.2.1
		6.5.2 Plumbed eye/face washes shall be activated weekly for a period long enough to verify operation and ensure that flushing fluid is available. (See Appendix B7)	new
		6.5.3 Self-contained eye/face washes shall be visually checked weekly to determine if flushing fluid needs to be changed or supplemented. Such inspection shall be conducted in	new

		accordance with manufacturer's instructions.	
		6.5.4 Employees who may be exposed to hazardous materials shall be instructed in the location and proper use of eye/face washes.	new
		6.5.5 All eye/face washes shall be inspected annually to assure conformance with Section 6.4 requirements of this standard.	
7.	Eye/Face Wash Equipment	Combination Units	changed header title
7.1	Performance of Eye/Face Wash Units	Performance of Combination Units	changed header title
7.1.1		Emergency showers shall meet the performance requirements of Section 4.	similar; reworded
7.1.2		Eyewashes shall meet the performance requirements of Section 5.	similar; reworded
7.1.3		Eye/face washes shall meet the performance requirements of Section 6.	similar; reworded
7.1.4	Emergency eye/face wash equipment shall be capable of delivering flushing fluid to the eyes and face not less than 11.4 liters per minute (3.0 gallons per minute) for 15 minutes.	Drench hoses shall meet the performance requirements of Section 8.2 at the pressure and flow specified by the manufacturer.	new, eliminated 1990 flow rate and replaced with manufacturer recommendations
7.1.5	The unit shall be designed to provide enough room to allow the eyelids to be held open with the hands while the eyes ae in the stream of water.	NOTE: The eyewash or eye/face wash section of a combination unit is not considered an "obstruction" in this context to allow for simultaneous use of emergency shower and eyewash equipment.	requirement removed
7.2	Performance Control Valve	Performance Control Valve	identical
7.3	Manufactures Performance Testing	Testing Procedures for Certification	new

		Each part of the combination unit shall be certified individually and when activated simultaneously be in accordance with the procedures outlined in Sections 4, 5, 6 and 8.2, depending on which of the components listed in Section 7.1 are included.	
7.4 Installation	Installation	Installation	1400
7.4.1	Removed unit be positioned 33–45 inches from floor and 6 inches from wall or nearest obstruction.	Be assembled and installed in accordance with the manufacturer's instructions, including flushing fluid delivery requirements.	new, removed 1990
7.4.2			identical
7.4.3			identical
7.4.4	Removed requirement that travel distance be within 100 feet.	Be in accessible locations that require no more than 10 seconds to reach. The combination unit shall be located on the same level as the hazard and the path of travel shall be free of obstructions that may inhibit its immediate use.	new, removed 1990
7.4.5		Deliver tepid flushing fluid. In circumstances where chemical reaction is accelerated by flushing fluid temperature, a facilities safety/health advisor should be consulted for the optimum temperature for each application. (See Appendix B6)	new
		7.4.6 When the combination unit is installed, its performance shall be verified in accordance with the following procedures:	new

		(1) With the unit correctly connected to the flushing fluid source and the valve(s) closed, visually check the piping connections for leaks. (2) Open the emergency shower and eyewash or eye/face wash valves to the full open position. The valves shall remain open without requiring further use of the operator's hands. (3) Activate the valves and check the performance of the emergency shower, eyewash and eye/face wash valves as described in Sections 4.5.7, 5.4.7 and 6.4.7 respectively, while operating simultaneously. (4) Using a temperature gauge or other means, determine that the flushing fluid is tepid. NOTE: Where hand-held drench hoses are part of the combination unit, the flow and pressure shall be specified by the manufacturer.	
7.5	Maintenance and Training	Maintenance and Training	identical
7.5.1		Manufacturers shall provide operation, inspection and maintenance instructions with combination units. Instructions shall be readily accessible to maintenance and inspection personnel.	new
7.5.2			identical
7.5.3		Self-contained combination units shall be visually checked weekly to determine if flushing fluid needs to be changed or supplemented. Such	new .

		inspection shall be conducted in accordance with manufacturer's instructions.	
7.5.4		Employees who may be exposed to hazardous materials shall be instructed in the location and proper use of combination units.	changed "chemical splash" to "Hazardous Materials"
		7.5.5 All combination units shall be inspected annually to assure conformance with Section 7.4 requirements of this standard.	new
8.	Hand-held Drench Hoses	Supplemental Equipment	changed header title
8.1	Performance Drench Hoses removed requirement of 11.4 liters per minute flow rate	Personal Wash Units	moved to Section 8.2.1
		8.1.1 Performance of Personal Wash Units	new section
		8.1.1.1 Personal wash units shall have the capacity to deliver immediate flushing fluid without being injurious to the user. Personal wash units do not meet the criteria of plumbed or self-contained eyewash equipment.	new
		8.1.1.2 In circumstances where chemical reaction is accelerated by flushing fluid temperature, a facilities safety/health advisor should be consulted for the optimum temperature for each application.	new
		8.1.2 Installation Personal wash units shall be protected from freezing and shall not be exposed to ambient temperatures exceeding 38 °C (100 °F).	new

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		8.1.3 Maintenance, Training and Storage	new section
		8.1.3.1 Manufacturers shall provide operation, inspection and maintenance instructions with personal wash units. Instructions shall be readily accessible to maintenance and inspection personnel.	new
		8.1.3.2 All personal wash units shall be inspected and maintained in accordance with manufacturer's instructions and shall meet applicable regulatory requirements.	new
		8.1.3.3 Employees shall be instructed in the location, proper use and application of personal wash units.	new
	-	8.1.3.4 All personal wash units shall be inspected annually to assure conformance with Section 8.1 requirements of this standard.	mislabeled as 8.1.2.4, new
8.2	Performance Control Valve	Drench Hoses	header change
		8.2.1	identical
		8.2.2	identical
	-	8.2.3	identical
-		8.2.3.1	identical
		8.2.3.2 The area around the drench hose shall be well lit, and free of debris that may inhibit its immediate use.	minor change
		8.2.3.3	identical
		8.2.3.4 Deliver tepid flushing fluid. In circumstances where chemical reaction is accelerated by flushing fluid temperature, a facilities	new

		safety/health advisor should be consulted for the optimum temperature for each application. 8.2.4 Maintenance and Training	new section
		8.2.4.1 Manufacturers shall provide operation, inspection and maintenance instructions with drench hoses. Instructions shall be readily accessible to maintenance and inspection personnel.	new
4 - 3 - 3 - 3 - 3 - 3 - 3 - 3 - 3 - 3 -	建设设施设施设施设施设施设施	8.2.4.2	identical
		8.2.4.3 Self-contained drench hoses shall be visually checked weekly to determine if flushing fluid needs to be changed or supplemented. Such inspection shall be conducted in accordance with manufacturer's instructions.	new
		8.2.4.4 Employees who may be exposed to hazardous materials shall be instructed in the location and proper use of drench hoses.	changed "chemical splash" to "Hazardous Materials"
		8.2.4.5 All drench hoses shall be inspected annually to assure conformance with Section 8.2.3 requirements of this standard.	new
8.3	Manufactures Performance Testing Procedures		moved to 8.2.3.1, identical
8.4	Installation		moved to 8.2.3, identical
8.4.1			moved to 8.2.3.2, identical
8.4.2			moved to 8.2.3.1, identical
8.4.3		The area around the drench hose shall be well-lit, and free of debris that may inhibit its immediate use	moved to 8.2.3.2, new

8.5	Maintenance and Training		moved to 8.2.4
8.5.1			moved to 8.2.4.2, identical
8.5.2			moved to 8.2.4.4, changed "chemical splash" to "Hazardous Materials"
9 Combination Units			moved to Section 7
9.1			moved to Section 7
9.1.1			moved to Section 7
9.1.2			moved to Section 7
9.1.3			moved to Section 7
9.1.4			moved to Section 7
9.2			moved to Section 7.2
9.3			moved to Section 7.3
9.4			moved to Section 7.4
9.4.1			moved to Section 7.4.2
9.4.2			moved to 7.4.3 of 2014
9.4.3			moved to Section 7.4.1
9.4.4			moved to Section 7.4.4
9.5	Maintenance and Training		moved to Section 7.5
9.5.1			moved to Section 7.5.2 and 7.5.3
9.5.2			moved to Section 7.5.4
Appendix A	Additional Conditions for Emergency Eye Wash and Shower Equipment	Safety Considerations	1990 Appendix A separated into two (2) separate appendices
A1.	Delivered Water Temp, moved to App B6. Changed temperature range to (60°F - 100°F) from (60°F - 95°F)	Personal Wash Units	added instructional use for personal wash units
A2.	Water Capacity, moved to App B2. Updated wording but no change in direction. Minor recommendation change from 90 psi to 80 psi flow pressure.	First Aid	identical

А3.	Primary Protective Devices. Moved to App A4 renamed Personal Protective Equipment. Identical	Waste Disposal	identical
A4.	Alarm Devices. Moved to App B4, Identical	Personal Protective Equipment	identical
A5.	Waste Disposal. Moved to App A3. Identical	•	
A6.	First Aid Practices. Moved to App A4. Identical		
Appendix B	Removed Government Requirements	Installation Considerations	replaced with Appendix B titled Installation Considerations
B.1	用的19年1月1日 1980年 1	Supply Lines	new guidance
B.2		Water Capacity Changed temperature range to (60°F - 100°F) from (60°F - 95°F)	new guidance
B.3	人类的对象的对象的企业的企业的	Valve Operation	new guidance
B.4		Alarm Devices	identical
B.5		Placement of Emergency Eyewash and Shower Equipment Emergency eyewash and shower equipment should be available for immediate use, but in no instance should it take an individual longer than 10 seconds to reach the nearest facility.	new